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A study of the feasibility of transferring the army Health Clinic, St. Louis, to the U.S. Air Force. The study is comprised of both quantitative analyses and qualitative issues. The results of the study show a cost-avoidance through realignment of the Clinic in addition to improved patient access and improved coordinated care performance for the Scott Air Force Base Medical Center.

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A STUDY ON THE TRANSFER OF THE ST. LOUIS ARMY HEALTH CLINIC TO THE AIR FORCE

A Graduate Management Project

Submitted to the Faculty of

Baylor University

In Partial Fulfillment of the

Requirements for the Degree

of

Master of Health Administration

by

Captain James T. Walsh, MS

February, 1993

Running Head: St. Louis Clinic

TABLE OF CONTENTS

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I would like to express appreciation for the support of my interim Deputy Commander for Administration, Major Neal E. Stockmyer, for the freedom to do what was necessary for this project. I also thank the Commander and Staff of the Scott Air Force Base Medical Center for their contribution to my data collection and for their eager role in helping the ideas put forth in this paper to become a reality. And, of course, the staff of the Fort Leonard Wood Medical Department Activity for their support during this period of endeavor.

ABSTRACT

This project studies the quantitative and qualitative aspects of transferring control of the St. Louis Army Health Clinic to the U.S. Air Force. The study focuses on the catchment area currently falling under the responsibility of the Scott Air Force Base Medical Center. Lying well within the Scott catchment area but far from its parent headquarters at Fort Leonard Wood, MO, the Clinic is in a position that will influence the success of the coordinated care program that the Scott Medical Center will soon be initiating.

The results of the cost-effectiveness analysis predict a potentially significant cost-avoidance in the catchment area. The qualitative analysis, focusing on the managerial criteria and aspects of the transfer, also support such a realignment.

The conclusions drawn from the study demonstrate that "local ownership" of the Clinic would enhance the coordinated care program for Scott Medical Center. and reduce operating costs. Another conclusion demonstrates that the Clinic's location may inhibit patient access, potentially affecting effectiveness.

The premier recommendation of the project is to realign the Clinic under the Scott Medical Center with a further recommendation to move its location.

A Study on the Transfer of the

St. Louis Army Health Clinic

to the Air Force

The Coordinated Care Program initiated by the Department of Defense has increased the awareness of Medical Treatment Facility (MTF) Commanders of the need to provide quality health care to eligible beneficiaries in an efficient manner. This managed care program encourages the provision of care in the most cost-effective way without compromising quality and access. This management project explores the feasibility of realigning the U.S. Army Health Clinic, Saint Louis, Missouri, under the U.S. Air Force as one avenue for improving the efficiency of providing health care in the Department of Defense (DOD).

Conditions which prompted the study.

As one of the predominant issues in the reform of the Department of Army medical system, the Gateway to Care program has created an environment in which administrators and clinicians alike, strive to improve operations and avoid unnecessary costs.

The U.S. Army Medical Department Activity (MEDDAC) at Fort Leonard Wood, Missouri is composed of several entities in addition to the main General Leonard Wood Army Community Hospital. This situation offers many opportunities to explore ways to improve the efficiency

of a relatively large system. The Fort Leonard Wood MEDDAC includes several substations such as troop medical clinics, health clinics and occupational health clinics. The Army Health Clinic in St. Louis (hereafter referred to as the "Clinic") offers ample opportunities for exploring cost-effective measures for maintaining services for beneficiaries, while improving efficiencies. These efficiencies include not only cost avoidance measures but also patient services and convenience. After an initial scan of the current situation at the Clinic, it was determined that two of the alternatives to its current operation are the possibilities of transferring the "ownership" of the Clinic to the Air Force Medical Center, Scott Air Force Base, Illinois, and relocating the Clinic to a new location. The conditions which prompted the decision to study this realignment follow.

The St. Louis Army Health Clinic falls under the command and control of the Medical Department Activity, Fort Leonard Wood, Missouri. The Clinic provides primary care services and some limited services in pathology, dental, EKG, and optometry to a defined population of approximately 20,000 beneficiaries; to include Active Duty and their eligible family members,

Retirees and their eligible family members, and eligible survivors (The beneficiary population will be further described in the next chapter). With its associated dental clinic, the Clinic employs 44 military and civilian personnel. Total costs of operating the Clinic approach $3 million per year.

The Clinic is located approximately 130 miles from Fort Leonard Wood, in the heart of downtown St. Louis. This location is within the 40-mile catchment area of the Scott AFB Medical Center, which is approximately 25 miles away. This Medical Center is a tertiary care teaching facility for the Air Force Medical Department. As can be surmised, the Clinic's beneficiary population overlaps with that of the Scott Medical Center. The significance of this situation and its potential impact on future coordinated care programs at Scott Medical Center, to include the allocation of CHAMPUS funds to the Commander, will be discussed later.

During Fiscal Year 1991, CHAMPUS expenditures attributed to the Scott AFB/St. Louis catchment area exceeded $18 million, of which $4.6 million were patient out-of-pocket costs (Draft Managed Care Assessment, 1992). The services provided through CHAMPUS reimbursement ran the spectrum from EENT,

general surgery, neurosurgery, urology, obstetrics and gynecology, to name only a few. A full listing of the categories of services provided is shown in Appendix B.

The management question.

This study attempts to answer the question: Can the Federal Government improve the efficiency of providing health care to eligible beneficiaries of the military health care system in the St. Louis area by realigning the Army Health Clinic under the Air Force and/or relocating the Clinic?

Literature review.

This study focuses on the economic analysis of the effects of transferring control of the Clinic to the Air Force. Literature suggests some methods of conducting this analysis. Warner and Hutton (1980), in a search of nearly 500 articles of the literature current at that time, determined that the prevalence of the use of cost-benefit analysis (CBA) and cost-effectiveness analysis (CEA) techniques is increasing in health care. This article defined the differences between CBA and CEA. The CBA is best used in comparing courses of action which are dissimilar, such as brewing beer versus publishing magazines, and their resulting opportunity costs. In health care, CBA often involves

a factor of health levels or added years of life expectancy expected to result from differing courses of action involving health care policies. In contrast, conducting a cost-effectiveness analysis is a common method of comparing courses of action of a similiar nature, such as performing one type of invasive surgical procedure versus another type of procedure, resulting in equivalent outcomes.

Jacobs (1991), in an article comparing these two methods of economic measurement, shares the same basic concepts of CBA and CEA. The article offers some examples of conducting such analyses but focuses mostly on clinical decisions and medical procedures.

Weinstein and Stason (1977) focused on recommended procedures for cost-effectiveness analyses in health care. This article gives a good general concept of conducting a CEA for health care on the macro-social level, involving morbidity and quality-adjusted life years (QALY).

These articles suggest that, while most CEA studies have focused on varying levels of health or varying types of services provided, the CEA can also be used while holding health levels or services constant and measuring the changes in cost for the alternative

courses of action in question. This literature suggests that a cost-effectiveness analysis would be the method of choice for conducting the proposed study of retaining the Army status of the Clinic versus realigning the Clinic with the Air Force.

Purpose.

The purpose of this study is to determine whether the efficiency of providing health care to beneficiaries in the St. Louis area could be improved by realigning the Clinic under the Air Force as part of the Scott Medical Center organization. The nature of this study requires both the quantitative cost-effectiveness analysis as well as a qualitative analysis of issues which cannot necessarily be quantified but which must be considered in this issue.

The quantitative study will evaluate the management question as presented earlier: Can the Federal Government improve the efficiency of providing health care to eligible beneficiaries of the military health care system in the St. Louis area by realigning the Clinic under the Air Force?

Particular attention will be paid to the following information in determining the quantitative conclusions: 1) current number of patient visits

within the catchment area, which includes the Clinic, the Medical Center and CHAMPUS, 2) current costs of CHAMPUS in the Scott AFB catchment area, 3) current costs of operating the Scott Medical Center and, 4) current costs of operating the Clinic, 5) the anticipated cost of providing health care to DOD beneficiaries in the St. Louis area without realignment and, 6) the cost of providing the same care with realignment.

Method and Procedures

The method for conducting the quantitative analysis for this study follows the approaches described in the literature reviewed above, with the exception that some alterations of procedures have been more closely tailored to the needs of this project. The design of the study itself has been adapted from S. Isaac and W.B. Michael (1981). The approach recommended by these authors for this type of study is a "descriptive research" method which lends itself most adequately to this type of economic study where statistical analyses are not practical. The qualitative issues will be addressed in the discussion chapter of this paper.

It must be noted here, that this project necessitates considerable coordination with agencies both within the Army as well as external to the Army. The first step in the process for this study was to gain a certain level of acceptance for the general concept of transferring ownership of the Clinic, primarily for the purpose of building a concensus that the project was of potential value. Also, gaining acceptance allowed the freedom to conduct research and obtain information from the involved agencies with the support of the appropriate Commanders and Directors.

Acceptance of the project was gained through a series of discussions, information papers, reports and telephone conversations directed to the Commanders of the Fort Leonard Wood MEDDAC, the Scott Air Force Base Medical Center, key staff members of each facility, the Officer-In-Charge of the Clinic, the Assistant Director of the Jefferson Barracks Veterans Administration complex in St. Louis, and selected staff members of Fort Leonard Wood MEDDAC's corporate headquarters, the U.S. Army Health Services Command. Once this acceptance was received, doors were open for obtaining data and information necessary for conducting the study.

The cost-effectiveness analysis flows in the following manner: First, the costs of providing care in the catchment area are be determined. This entails detailed cost data for the Clinic, the Medical Center and CHAMPUS. Coupled with the cost data is the workload information for each entity. For the purposes of this study, the numbers of patient visits are used as a proxy for workload. Next, estimates are made of the future costs of providing care in the catchment area. Of course, since there is no definitive way to determine such future costs, this study considers different alternatives that could potentially reduce costs. Then, future workload estimates are made for each entity with the intent of determining whether a shift of patient visits would occur from one location to another. Finally, other considerations, such as patient access issues and potential arrangements with other agencies that could influence costs are discussed.

The analysis shows current costs of providing health care to eligible beneficiaries inclusive of the three components: Clinic, Medical Center, and CHAMPUS, in relation to the number of services provided. Services provided, as will be discussed later, is

represented by the number of patient visits. Then, a comparison is made using the same formula but reflecting expected costs of providing the same volume of services if the transition were to occur. The comparison of the two costs, coupled with the qualitative criteria, forms the basis for recommendations on whether transfer of the Clinic to the Air Force and/or relocating the Clinic would improve the efficiency of providing health care in the catchment area.

Data collection.

Obtaining the appropriate information required acquisition of CHAMPUS expenditure data from the OCHAMPUS database and the Tri-Service CHAMPUS Statistical Database Project (TCSDP). Information from TCSDP, which operates the Financial Analysis Support System (FASS), has workload and cost information which conflicts with that obtained from OCHAMPUS. During data collection on these items, it was found that the OCHAMPUS data obtained through Army channels and Air Force channels were more closely matched than the data obtained from FASS. For this reason, and for the purposes of this study, OCHAMPUS is the predominant source of cost and workload data. These sources

provided information on the costs of providing CHAMPUS services for all qualified beneficiaries within the St. Louis/Scott AFB catchment area, typically defined as a 40-mile radius measured from the military treatment facility (in this case - Scott AFB). The results of this research is described and utilized later in this study.

Further research regarding budgetary information on the costs of operating the Clinic, as it currently stands, was obtained from the Resource Management Division of the Fort Leonard Wood MEDDAC, as the primary resource allocator for the Clinic and other outlying MEDDAC facilities. Fiscal resource information regarding the Scott Air Force Base Medical Center was obtained through visits to that facility. Coupled with the above-mentioned CHAMPUS expenditure information, a relatively reliable figure on total military health care costs for the catchment area will be assumed.

Other information, such as Clinic staffing levels and workload, characteristics of the physical location of the Clinic, amenities, ancillary issues, and potential alternatives (to be discussed later) was obtained through a two-week visit with the Clinic.

This visit offered information, though not necessarily quantifiable, which may have an effect on decisions potentially made as an extension of this project.

Limitations of the study.

This study involves the use of data from several different agencies and data sources. In the effort to keep all cost and visit data within the same fiscal year, Fiscal Year 1991 has been used as the base for all information from which conclusions were drawn. This period of time allowed for definitive information on actual expenditures for all entities involved; the Clinic, the Medical Center, and CHAMPUS. As definitive data for Fiscal Year 1992 becomes available, this study could be readily updated to reflect more current information.

Validity and reliability.

The validity of the collected data will not involve statistical criteria as this study centers around the required and available financial data. This data is assumed to be reliable due to the nature of the sources of the data.

Ethical considerations.

Ethical considerations for this study will result in the confidentiality of patient information. Since

there is has been no direct experimental or other contact with particular subjects, only database information, there is no threat of unethical activity.

Quantitative study design.

As mentioned earlier, the method used for conducting the financial analysis for this project is a cost-effectiveness analysis as part of the descriptive research method. This analysis will be used to measure costs under the current and proposed situations and will provide decision criteria for the management question.

In designing the analysis, then, the most critical issues will revolve around 1) the cost of providing care in the catchment area with realignment and 2) the cost without realignment. Both of these costs are derived from several components. These component costs include the Clinic, the Medical Center, and CHAMPUS.

The Army Health Clinic.

The first component consists of the cost of operating the Clinic itself. This cost is comprised of civilian and military pay expenses, supplies and equipment, rent expenses, and miscellaneous expenses. Information obtained from the Fort Leonard Wood MEDDAC Resources Management Division reflect all Fiscal Year

1991 (1 October 1990 through 30 September 1991) actual expense obligations as exhibited in Table 1.

St. Louis Clinic Obligations

Fiscal Year 1991

Civilian Pay	$ 868,000
Military Pay	1,120,500
Supplies and Equipment	618,100
*Rent for Clinic Space	224,000
Miscellaneous Expenses	37,100
**Total FY91 Obligations	$2,867,700

*Rent includes utilities, housekeeping and three (3) free parking spaces.

**Total FY91 obligations include Health Clinic expenditures, the co-located Dental Clinic, and Goodfellow Occupational Health Clinic.

Table 1 Clinic Expenses

Note: A detailed expense report is at Appendix C.

The number of clinic visits conducted at the Army Health Clinic during Fiscal Year 1991 is shown in Table 2. It should be noted, however, that these figures represent only those visits in which there was a patient/physician encounter. Since a transfer of the Clinic would involve the transfer of these visits, and all ancillary support for these visits, these figures will be used as a proxy for workload at the Clinic.

Annual Clinic Visits FY 1991

Specialty	Annual Visits
Primary Care	18,912
Pediatrics	2,903
Flight Medicine	1,176
TOTAL	22,991

Table 2 Clinic Visits

Note: It is expected that the demand for clinic visits at the Army Clinic will not change significantly if a realignment should occur, since the beneficiary population will not be changed.

In terms of patient throughput, which is defined as the complete episode of care involved in one complete clinic visit, the cost of providing care for each visit, or throughput, is shown below. The total clinic cost shown does not include the dental expenditures shown at Appendix C since dental visits are not considered in this study.

$$\frac{\$2,407,500 \text{ total Clinic costs less Dental*}}{22,991 \text{ throughputs}} = \$105 \text{ per throughput}$$

*less Dental means that the expenditures for dental operations and personnel are excluded from this figure

Other characteristics of the Clinic include its location in the Federal Building at 1520 Market Street in downtown St. Louis. It occupies 13,416 square feet

of space which holds the Clinic and an attached Army Dental Clinic. The building is operated by the General Services Administration (GSA) which leases this space to the Army. At the current time the rental cost is paid directly to the GSA by the Army Training and Doctrine Command (TRADOC). This arrangement is scheduled to change in Fiscal Year 1994 by an allocation of funds to Health Services Command for payment to the GSA. This change will place responsibility for the lease of this space directly in the hands of the Army Medical Department.

The civilian and military pay components of the Clinic's operating expenses are a result of the following assigned personnel strengths (Table 3):

	Authorized	Assigned
*Health Clinic	29	31
Dental Clinic	11	12
Occ. Health Clinic	4	4
Total Persons	44	47

*Five (5) physicians are assigned. Two are military and three are civil service.

Table 3 Clinic Personnel

As mentioned earlier, there are other considerations involved in the transfer of this Clinic. Some of the Clinic-specific items are discussed here.

Adjunct to the actual operating expenses of the Clinic are the parking fees required of Clinic staff as well as patients. Downtown St. Louis is a relatively congested area and parking anywhere around the Clinic building comes at a minimum cost of $2.50 per day. Availability of parking had not been a problem, until December of 1992. At this time, the adjacent building, Kiel Auditorium, began a major renovation program that eliminated its attached parking garage. This obviously has increased the demand for other existing spaces that serve the Federal building. In addition, construction equipment parking and storage has also spilled over into this lot, further reducing available spaces. This situation has placed a considerable burden on staff and patients, both financially and with reduced ease of access to the Clinic. The construction is planned to continue through 1995. Later in this paper, a recommendation will be discussed which may help to alleviate this problem.

Scott Air Force Base Medical Center.

The second component of overall area healthcare costs for DOD beneficiaries are the Scott Air Force Base Medical Center's expenditures. This medical treatment facility is the largest DOD hospital in the

St. Louis catchment area. Outpatient visits for Fiscal Year 1991 totalled 303,791. Admissions totalled 6,523. The Medical Center employs approximately 912 personnel. Information obtained from Scott Medical Center in its "Draft Managed Care Needs Assessment" (September 1992), indicates that total costs for all operations for Scott Medical Center for Fiscal Year 1991 were approximately $66 million (Table 4). A breakdown of these expenses follows and are presented further at Appendix D.

Scott Medical Center Obligations

Fiscal Year 1991

Military Pay	$32,784,600
Civilian Pay	6,068,200
Contract Hlth Svcs	1,871,200
Supplemental Care	2,137,800
Medical Supply	14,166,000
Facility Maintenance	1,366,200
Miscellaneous	7,596,100
Total Obligations	$65,990,100

Table 4 Scott Medical Center Expenses

The Medical Center currently, or at the time of publication of the "Draft Managed Care Needs Assessment," had no CHAMPUS-related expenditures which, therefore, is not included in the FY 1991 information.

The total number of patient encounters (outpatient visits and admissions) for Scott Medical Center were: 303,791 outpatient + 6,523 admissions = 310,314

encounters. The same source lists the total number of outpatient clinic visits in Fiscal Year 1991 as follows:

Outpatient Visits - FY 1991

Active Duty	Dependent Act. Duty	Retirees	Dependent Retirees	Other	TOTAL
87,339	112,320	44,153	56,533	3,446	303,791

Of these outpatient visits, the following specialties (shown in Table 5) are common to the Army Health Clinic and are used as a basis for comparison with the Clinic and CHAMPUS:

Scott Medical Center

Annual Outpatient Visits FY 1991

Specialty	Annual Visits
Primary Care	43,272
Pediatrics	30,708
*Family Practice	26,038
Flight Medicine	28,884
TOTAL	128,902

*Family Practice is included here as an equivalent function of primary care that is not specifically delineated in the Army Clinic's workload.

Table 5 Scott Medical Center Visits

Note: Since the beneficiary population is not expected to change within the catchment area, the demand for these primary care clinic visits is not expected to change should a realignment of the Army

Health Clinic occur.

Costs estimated for each of these outpatient visits as estimated through the Medical Expense Performance Reporting System (MEPRS) obtained from Scott Medical Center are shown in Table 6.

Scott Medical Center

Outpatient Visit Costs for FY 1991

Specialty	Per Visit Cost		Number of Visits		Total Cost
Primary Care	$65	x	43,272	=	2,812,680
Pediatrics	52	x	30,708	=	1,596,816
Family Practice	117	x	26,038	=	3,046,446
Flight Medicine	46	x	28,884	=	1,328,664
Outpatient Cost GRAND TOTAL					$8,784,606

Table 6 Scott Outpatient Visit Costs

The average outpatient visit (throughput) inclusive of all four categories listed above is:

$$\frac{\$8,784,606 \text{ total outpatient throughput cost}}{128,902 \text{ total outpatient visits}} =$$

$69 per outpatient visit

Note: These costs are computed utilizing a step-down cost-accounting method which allocates all associated costs, to include administrative overhead, utilities, and ancillary support, to each particular cost-center within the facility.

CHAMPUS.

At the time of this writing, the Scott Air Force Base Medical Center is not a participant in the Department of Defense coordinated care initiative. Therefore, the Medical Center Commander does not have control over the CHAMPUS expenditures within the Scott catchment area, nor the ability to reallocate CHAMPUS funds in the effort to recapture some of the more costly procedures that are currently being paid under the CHAMPUS program. Interest in the Clinic realignment project stems from the fact that the Medical Center will be participating in the coordinated care program in the near future and that initiatives to provide care more efficiently must be investigated now. In order to grasp the value of the total cost of providing health care to DOD beneficiaries in the catchment area, an understanding of the costs of CHAMPUS expenditures (the third component of the total cost formula) must be included in this study.

Information on CHAMPUS utilization and expenditures for the Scott catchment area was obtained from the OCHAMPUS Information Systems Division (1992), through the Coordinated Care Directorate of the Scott Medical Center. Table 7 demonstrates a summary of

CHAMPUS visits and costs for Fiscal Year 1991 for the catchment area. A more complete list of patient visit categories and expenditures for this time period is, again, offered in Appendix B.

CHAMPUS Data for FY 1991

Scott Catchment Area

Beneficiary Visits	
Active Duty Dependents	10,739
Retirees	2,472
Retiree Dependents	5,210
TOTAL Beneficiary Visits	18,308
Expenditures	
Total Government Cost	$13,649,342
Total Patient Cost	4,645,705
TOTAL Gov and Pt Cost	$18,295,047

Table 7 CHAMPUS Visits and Costs

Note: These costs do not include the costs of pharmaceuticals dispensed through CHAMPUS, which are included in cost figures for the DOD facilities.

In terms of average per-visit costs for outpatient services, the following information is offered:

$$\frac{\$8,200,235 \text{ total patient and gov't cost}}{60,133 \text{ total outpatient visits}} =$$

$137 per outpatient visit

If considering only government costs for CHAMPUS, excluding patient copays and deductibles, the average outpatient cost per visit equals $88.

Recapitulation of Costs.

The total cost of providing health care for the beneficiary population within the Scott Medical Center catchment area is shown in Table 8.

Catchment Area Costs

Army Health Clinic (- dental)	$ 2,407,500
Scott Medical Center	65,990,100
*CHAMPUS (includes pt. costs)	18,295,047
TOTAL Costs	$86,692,647

*CHAMPUS costs do not include pharmaceuticals dispensed and reimbursed through CHAMPUS.

Table 8 Total Catchment Area Costs

A comparison of each of the three entities providing outpatient services is depicted in Table 9.

Army Health Clinic	$105/visit
Scott Medical Center	$69/visit
CHAMPUS (including pt. cost)	$137/visit
CHAMPUS (gov't cost only)	$88/visit

Table 9 Average Outpatient Per Visit Costs

Total outpatient costs for the catchment area for the specialties noted above are in Table 10.

Army Health Clinic (- Dental)	$2,407,500
Scott Medical Center	8,784,606
CHAMPUS	8,200,235
Total Area Outpatient Cost	$19,392,341

Table 10 Total Catchment Area Otpt Costs

Recapitulation of Visits.

Since the total number of patient visits is not expected to change significantly with a transfer of Clinic ownership, the following data is provided in order to give a perspective of catchment area workload. The total number of annual outpatient visits in the Scott catchment area are shown in Table 11.

Catchment Area Visits

Army Health Clinic	22,911
*Scott Medical Center	128,902
CHAMPUS	60,133
TOTAL outpatient visits	211,946

*Only includes family practice, pediatrics, flight medicine and primary care.

Table 11 Total Catchment Area Visits

From this information, the results of the cost effectiveness analysis can be drawn.

Results

The final phase of the cost-effectiveness analysis for the pre-alignment situation results in a ratio of costs over workload for the Clinic reflected in the following:

$$\frac{\$2,407,500 \text{ total outpatient Clinic costs}}{22,911 \text{ total outpatient Clinic visits}} = \$105 \text{ per outpatient visit}$$

As demonstrated earlier, the cost of providing services

for a single outpatient visit at the Clinic is substantially higher than the cost associated with a similar visit at the Scott Medical Center (approximately 152 percent of a Medical Center visit). While the information on cost allocations performed by the MEPRS system is not perfect, this result still reflects some inefficiency in Clinic operations.

Attention should also be drawn to the discovery that the Medical Center performs outpatient services at a lower cost to the government than does CHAMPUS. When patient co-pays and deductibles are included, the Medical Center performs these services at approximately 50 percent of the CHAMPUS charge.

Future Costs.

Realignment of the Clinic under the Air Force would be expected to have little quantifiable effect on the volume of patient visits either on CHAMPUS or the Medical Center until the implementation of its coordinated care program. Only the potential costs of providing the same amount of care at the Clinic under new ownership will be considered here.

Quantifying specific savings through realignment and/or relocation is, at best, speculation. However, one component of operating expense for the Clinic which

would be expected to be substantially reduced, if the relocation of the Clinic to the Jefferson Barracks Veterans Administration complex, is the rent expense. Until approval of this relocation is given, the costs and/or savings to be realized by doing business with the Veterans Administration cannot be calculated since these costs are dependent on future negotiations. Potential savings include VA/DOD sharing arrangements for laboratory procedures, x-ray procedures and radiology services, linen services, and hazardous waste disposal.

The future costs that can be discussed, however, are the potential costs per patient visit based on the historical outpatient visit costs at the Scott Medical Center. As shown earlier, an average outpatient visit in one of the primary care specialties equals approximately $69, versus $105 at the Health Clinic. Of course, there are advantages of economies of scale which help to reduce the average per-visit costs at the Medical Center that have not been possible at the Clinic. These economies of scale result from services ranging from laboratory and X-ray procedures to personnel. In the effort to be somewhat self-sufficient in providing primary care services,

equipment and personnel were maintained but not necessarily utilized at full capacity. One factor which made such self-sufficiency necessary was the substantial distance of the Clinic's supporting headquarters at Fort Leonard Wood.

Should the Clinic be realigned under the Scott Medical Center, the proximity would lend itself to sharing in the economies of scale enjoyed there in terms of X-ray, lab, pharmacy services, and administrative services.

It is clear from the CEA that the costs per outpatient visit at the Scott Medical Center are significantly lower than those of the Clinic. In an effort to provide a somewhat tangible figure for future costs, which assumes the benefits of economies of scale, shared services and simple proximity to higher headquarters (Scott Medical Center), it can reasonably be assumed that such costs per patient visit will fall somewhere between the current Medical Center costs and the current Clinic costs. As a general estimate of future costs of providing services for an average primary care visit at the Clinic under Scott Medical Center control, a liberal figure of $87 will be used (this amount is the midpoint between Scott Medical

Center costs and Clinic costs). This amount assumes that, since the Clinic would remain external to the main facility, there would still be some duplication of services and personnel, but that many ancillary support procedures like X-ray readings, lab procedures and some administrative support could be performed at the main facility. Realizing that this cost does not differ tremendously from the CHAMPUS per visit government cost of $88, the point of patient satisfaction must be considered.

While the $88 government cost per CHAMPUS outpatient visit is of vital concern, the benefitis offered to the patient must be considered. For the same visit that costs the government $88, the patient pays $49 (Table 9). It can reasonably be assumed, then, that if the government can provide the same service at the same government cost, while eliminating patient costs, patient satisfaction with the military health care system would improve. This situation could potentially result in better enrollment and empanelment for coordinated care programs in the area, allowing the Medical Center the opportunity to better control CHAMPUS expenditures.

Applying the $87 figure to the current volume of patient visits, the costs for operating the Clinic would be estimated as follows:

$87 per visit x 22,991 visits = $2,000,217

This future cost estimate, compared to the current cost of operating the Clinic ($2,407,500 less Dental), represents a $407,283 cost-avoidance. Of course, such future cost estimates cannot be perfectly predicted but serve to give generalizations of potential savings.

In determining whether the efficiency of the provision of health care in the St. Louis are would improve, as determined in the above quantitative analysis, the overall savings achieved through such a realignment are potentially significant, which tends to lead to greater efficiency. While such a transfer would likely not cost the Department of Defense more for maintaining current levels of care, the projected potential savings, in the short term, amounts to $407,283 from a total expenditure in excess of $86 million; a savings of 0.5 percent (2.1 percent per outpatient visit), if the estimate is correct. Therefore, the answer to management question as indicated is in the affirmative; that realigning the Clinic under the Air Force and/or relocating the Clinic

will improve the efficiency of providing health care in the catchment area.

One could argue that any savings that could be realized if the Air Force assumed control of the Clinic could also be achieved through keener management by the Army but, again, cost is not the sole issue. What is left now is to determine the potential value of the realignment in terms of qualitative management issues beyond those of simple per visit costs.

Discussion

While the cost-effectiveness analysis favors the realignment of the Clinic, there are other criteria to be considered that may affect the recommendation for action. Most notably, these criteria include: coordinated care, patient access and satisfaction, and unity of effort.

Coordinated Care.

In an address to key leaders of the Army Medical Department at the Gateway to Care "Make it Happen" conference, Mr. Martin Kappert stated that "...two entry points cannot work in coordinated care" (1993). Mr. Kappert, the Deputy Assistant Secretary, Health Service Financing, Office of the Assistant Secretary of Defense, Health Affairs, struck the essence of one of

the key considerations of the realignment of the Clinic. Although the Scott Medical Center is not currently involved in a managed care program implementation phase, such participation is inevitable and plans for this move must now be formulated.

The key to the success of the coordinated care initiative is the improvement of the efficiency with which DOD medical facilities provide health care. Of course, there are numerous approaches to improving efficiency. Smart "at risk" business agreements with external providers, trimming unnecessary costs from internal operations, and case management are some of the approaches to achieving greater efficiency. One of the most important and, thus, necessary approaches is gaining the control and cooperation of the health care consumer - the patient.

The coordinated care program focuses on the enrollment and empanelment of patients into a "cooperative" arrangement where patients agree to restrict their use of services by relying on the medical direction provided by their assigned primary care "gatekeeper" physician. This primary care physician, then, becomes the patient's "point of entry" into the DOD health care system. In a coordinated care

environment where a hospital commander has control of all fiscal resources, including CHAMPUS funds, in his/her catchment area, the empaneled physician makes appropriate judgements as to the best course of treatment for the patient. This judgement considers the best, but most cost-effective care that can be provided for the patient before allocating resources for that patient's care. In the continuum of the coordinated care program, available in-house resources are balanced with available and price-negotiated services external to the hospital when determining where the empanelled patient should get care. To make this program work, the hospital commander who must have control over the resources in the catchment area must also have control over the directing physicians, or points-of-entry, to ensure that the use of these resources is in concert with his/her managed care objectives.

With two Services operating health care facilities in the same catchment area, there are essentially two points-of-entry. It then becomes difficult for the one commander (Air Force) who controls the coordinated care program to control the use of resources demanded by the Army's primary care physicians at the Clinic. While

the goal of Scott Medical Center will be to empanel all catchment area beneficiaries to specific "gatekeepers" in the effort to direct care efficiently, the Army Clinic's staff is not subject to the implications of this program. This situation has the potential to result in patients (as a matter of convenience) using two different points-of-entry into the DOD health care system, under the direction of different Services. Maintaining the Army Clinic in an Air Force catchment area would disrupt Scott Medical Center's coordinated care effort and has the potential to inhibit a patient's continuum of care by having multiple providers.

Patient access.

Always the primary objective of the military health care system, patient care is an important consideration in the realignment issue. Access is perhaps the most widely recognized aspect of patient care. The presence or absence of barriers to access have several effects on the health care system which exists to support its patients. Such barriers are perceived to exist on two levels in the Army Health Clinic. The first level is at the Clinic location itself. The second is in the relationship between the

Clinic and the Medical Center.

The perceived barrier to access at the Clinic itself is the patient parking arrangement. As discussed earlier, the Clinic is located in the heart of downtown St. Louis, a major metropolitan city. This area is congested with major high-rise office complexes, hotels, convention centers, athletic facilities, tourist attractions, and shopping centers. All of this activity contributes to significant competition for an inadequate number of parking spaces. What parking is available comes at a price. In the immediate vicinity of the Clinic, the cost is $2.50 per day, or any fraction thereof. Still, this parking is in short supply which causes most patients to park in distant lots at higher prices. This situational cost equates to a "user fee," or barrier, for the patients seeking care at the Clinic. Several articles refer to barriers such as cost and location as having negative effects on efficient, cost-effective health care (Lewis, Fein & Mechanic, 1976; Harkin, 1991; Friedman, 1984). Typically, when patients are inhibited by such barriers, they will delay seeking medical care while the affliction is in its earliest sub-acute (and least expensive to treat) stages. The natural follow-on to

this scenario is that the patient gets worse and finally seeks care when the affliction reaches more serious and expensive proportions.

The optimum goal of improving access is best described by Penchansky and Thomas (1981) as the "fit" between the patient and their health care provider. This fit includes five components: 1) availability of existing services, 2) accessibility of these services to the patient, 3) accommodation, or the ease with which a patient can get an appointment, 4) affordability of the service to the patient, and 5) acceptance to each other by both the patient and the provider. The "fit" involving the Clinic could be particularly improved in a couple of these aspects without diminishing the others.

One of these aspects is accessibility. By relocating the Clinic to a less-congested area, patients will be better able to travel to the Clinic without fighting constant traffic congestion.

The other aspect is affordability. If the Clinic could provide free parking to patients, as is provided to equal beneficiaries who are located on or near DOD installations, the tendency to seek care when illness is most easily treatable could be enhanced. In the

long-term, this measure could potentially reduce some costs of care.

As mentioned earlier, the second level of access to care is that which is between the Clinic and the Scott Medical Center. If considered with the Penchansky and Thomas definition of access, this aspect would be one of accommodation. In a study conducted at the Clinic, it was observed that sometimes there is a perception of reluctance on the part of some of the Medical Center staff when patients linked to the Army and the Army Clinic present themselves for care. The required care is, of course, always provided by the Medical Center. The problem exists with the patient's perception of this reluctance, which leads to a perceived lack of accommodation and, therefore, inhibited access. This accommodation could reasonably be expected to improve if clearer roles of responsibility for the provision of care were delineated and controlled. This point leads to the third qualitative consideration for realignment.

Unity of effort.

Nearly every author who has written about leadership, either in war or in business, will attest to the notion that unity of effort is essential in

accomplishing the organization's goals. Achieving this unity is essential to steering the team toward a concerted effort. In the military environment, unity of effort is usually facilitated by unity of command. The Commander's goals become the organization's goals and all efforts lead toward the same objectives.

The current situation in St. Louis does not contribute to a unity of effort between the Army Clinic and the Air Force Medical Center. Under a coordinated care program, the Medical Center Commander must have control over all military health care assets in the catchment area in order to best allocate resources and provide the most efficient care. With elements falling under two different Services, neither Commander formally answers to the other, and use of valuable resources may not be in concert with the global plan. With this element in mind, one could reason that a realignment would be beneficial to the health care system and to the patient. Such a move would place one responsible and accountable entity in control of the overall effort to provide cost-effective, quality care in the entire catchment area. In this catchment area, this would be the senior DOD medical commander.

Conclusions

From the results of the quantitative cost-effectiveness analysis, it has been seen that a realignment of the Army Clinic under the Air Force could be expected to achieve a reasonable cost-avoidance. This conclusion is drawn from the assumption that patient populations would not change, and the demand for care would not appreciably change. Staffing and equipment requirements for providing that care could possible be reduced or shared with the main facility. However, if the estimate of improving efficiency and reducing costs by moving the Clinic to the Jefferson Barracks VA complex is reasonable, the savings alone could finance the hiring of staff which could enhance the coordinated care effort. Even if there were no significant savings realized in the near-term, there is potential for substantial savings in the long-term as coordinated care is implemented and management of patients ensues.

A conclusion is also drawn that, through the benefits of unity of command, more efficient care could be provided to DOD beneficiaries. Realignment of the Clinic would facilitate this effort.

A final conclusion from this discussion is that patient access would be enhanced through the relocation of the Health Clinic, regardless of which Service operates it. As discussed earlier, the better the "fit" between the patient and the health care system, the better the chance for a satisfactory continuum of care, which benefits both the patient and the provider.

Recommendations

There are three possible courses of action for the provision of care in the St. Louis area: 1) keep everything as it is, 2) maintain Army control of the Clinic but move its location, and 3) realign the Clinic under the Air Force.

Keep everything as it is.

This course of action is, of course, the simplest to implement. Keeping the current system intact, however, is not the best alternative. If accepted, access to care would continue to suffer, and perhaps erode as Scott Medical Center implements its coordinated care program. Patients will continue to experience barriers to care which beneficiaries located on military installations do not encounter. Current marginal levels of coordination and cooperation between the two Services in the catchment area could be

expected to continue. The natural competitive atmosphere between the Services will continue to have a negative impact on the need for unity of effort.

Maintain Army control but change location.

The arguments against maintaining Army control of the Clinic are the same as those noted above. One option, as had been mentioned earlier however, is for the Army to move the location of the Clinic. Regardless of which Service controls the Clinic, the recommendation to change its location must be made here. Although other locations within the St. Louis area may exist, the opportunities offered at the Jefferson Barracks Veterans Administration complex seem to be the most advantageous for the Clinic. This location is approximately ten miles from the current location, still about the same distance from Scott Air Force Base. The area does not experience any level of congestion nearing the magnitude of the current downtown location. Parking for patients is free, and there are ample spaces. Through a tour of the facility with the local Assistant Director, it was observed that the main hospital building and most of the attached buildings have been newly renovated and are substantially vacant. There were several opportune

sites for the Clinic relocation.

Being somewhat anxious to improve on the utilization of the facilities, the VA expressed a strong desire to cooperate with DOD if such a proposal were to develop. VA/DOD agreements could be reached for significant reductions in what is currently being paid for rent in the Clinic's current location, as had been discussed earlier in this paper. Other opportunities exist for other VA/DOD sharing arrangements which could substantially reduce the operating costs of the Clinic. Such services could include laboratory services, radiology services, linen services and waste disposal services. Relocation of the Army Dental Clinic could also be accommodated in this facility. Food service facilities already exist for the staff and visiting patients. Working in proximity with the VA health care providers, the collegial and consultative interactions between the DOD and VA providers would enhance the overall health care environment, both for the staff and for the patient.

Realign the Clinic under the Air Force.

Realignment of the Army Health Clinic under the Air Force is the primary recommendation resulting from this study. While an immediate financial benefit is

possible through economies of scale in pharmacy, lab, X-ray, and administration services by improving the proximity of the headquarters, the qualitative aspects of this change also point to this alternative as the most favorable. The driving force for this recommendation is the coordinated care issue which neccessitates the need for unity of effort, coordination of assets, patient satisfaction, and quality of care. Attaining such unity could be achieved under two separate Services, but at greater cost of managerial effort than would be realized under realignment. Such a transfer also places the command and control headquarters in substantially closer proximity to the Clinic than its current headquarters. From a management and quality assurance perspective, this closer proximity makes this alternative most attractive.

Adjunct to the recommendation for realignment is the recommendation to relocate the Clinic to Jefferson Barracks for the reasons stated earlier. This action should be seriously considered by either Service that ultimately controls the Clinic.

If accomplished, the Air Force would have much to gain from the ability to control costs and improve

efficiency when it begins to implement coordinated care. Enrolling and empaneling beneficiaries would be much more efficient if only one agency were involved. Coordinating patient care plans could only be enhanced if only one agency could control the points of access to the system.

If the recommendation to realign the Clinic is accepted, it is suggested that the best time to make the change is prior to the initiation of the full-scale coordinated care program at Scott Medical Center. This action would allow all beneficiaries, whether Army, Air Force, Navy, or other eligible Services, to compete equally for inclusion in initial patient panels. Additionally, the Air Force would have a greater opportunity to assess its true beneficiary population and usage patterns by having access to all of the beneficiaries and by establishing an effective rapport with its supported population.

Transferring control of the Clinic and its assets to the Air Force has the potential to significantly improve the efficiency of the provision of health care to beneficiaries in the St. Louis area. Conservative estimates demonstrate potential reduced costs approaching one-half million dollars. Improved patient

access and better coordination of services will reduce redundancy in the system and result in greater success in the Air Force coordinated care effort. Providing care under the direction of one commander will afford unity in the effort to meet patient care goals.

In all, this realignment stands to gain much more in the efficiency of catchment area health care than would be achieved by maintaining the current organization. At a time when cooperation across Service lines is becoming more and more desirable, the recommendations presented in this study allow for not only Army involvement, but also a collaborative effort with the Air Force and the Veterans Administration. In this time of change and fiscal constraints, the government can afford no less.

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APPENDIX A

DEFINITIONS

CATCHMENT AREA - A defined area with an approximate 40-mile radius around a Department of Defense hospital. This area is typically regarded as the local management area for the hospital commander.

COORDINATED CARE - The Department of Defense health care program that strives to enhance the efficiency of providing care to beneficiaries through a careful balance of military health care capabilities and local civilian services.

COST-BENEFIT ANALYSIS - An analysis which compares the costs versus benefits of courses of action which are not necessarily similar. (pg. 4)

COST-EFFECTIVENESS ANALYSIS - An analysis which compares the costs versus the effectiveness of courses of action which are of a similar nature. (pg. 5)

DESCRIPTIVE RESEARCH - To describe systematically the facts and characteristics of a given population or area of interest, factually and accurately.

ENROLLMENT - The process of registering beneficiaries who wish to participate in the coordinated care program. Data from this registration is used for empanelment.

EMPANELMENT - The process of assigning enrollees to a specific health care provider. This action gives the patient a specific primary care provider who assumes the responsibility for managing the patient's health care needs.

GATEWAY TO CARE - The name for the Department of the Army coordinated care program.

RUN DATE: 22 JAN 1992
RUN TIME: 02:15:17
MODE: 76,BENE_ZIP

BASED ON CARE RECEIVED FROM OCT 1990 THRU SEP 1991
055 - SCOTT AFB, IL

COLLECTION PERIOD: 15 MONTHS

UNDUPLICATED

CATEGORY OF CARE - INTERNAL MEDICINE

	ADVERSE REACTIONS	ALLERGY	CARDIOLOGY (VASCULAR DISEASE)	DERMATOLOGY	ENDOCRINOLOGY	GASTRO-ENTEROLOGY	HEMATOLOGY
I. INPATIENT HOSPITAL SERVICES							
USER BENEFICIARIES	23	9	81	2	16	37	9
DEPNT OF ACT DUTY SPONSOR	9	4	11	1	5	20	6
RETIREE	3	0	49	1	3	4	0
DEPNT OF RET OR DEC SPONSOR	11	0	22	0	8	13	3
TOTAL HOSPITAL ADMISSIONS	24	12	100	2	16	39	30
HOSPITAL DAYS	85	38	750	12	64	148	244
AVERAGE LENGTH OF STAY (DAYS)	3.54	3.17	7.50	6.00	4.00	3.79	8.13
AVERAGE DAILY PATIENT LOAD	0.23	0.10	2.05	0.03	0.18	0.41	0.67
TOTAL GOVERNMENT COST	43,776	34,116	947,632	3,075	22,802	118,452	255,180
TOTAL PATIENT COST	8,797	2,642	169,512	10,048	5,949	33,635	9,943
TOTAL GOVT AND PATIENT COST	52,573	36,758	1,117,144	13,123	30,751	152,087	265,123
AVG GOVT COST PER ADMISSION	1,824.00	2,843.00	9,476.32	1,537.50	1,425.12	3,037.62	8,506.00
AVG GOVT COST PER DAY	515.01	897.79	1,263.51	256.25	356.28	800.35	1,045.82
II INPATIENT PROFESSIONAL SERVICES							
USER BENEFICIARIES	34	17	188	15	32	101	29
DEPNT OF ACT DUTY SPONSOR	17	14	29	3	12	44	12
RETIREE	4	0	100	3	5	20	8
DEPNT OF RET OR DEC SPONSOR	13	3	61	9	14	38	9
NUMBER OF VISITS	84	110	1,660	27	169	251	341
NUMBER OF NON-VISIT SERVICES	135	6	626	17	36	258	235
TOTAL GOVERNMENT COST	11,416	4,402	249,822	3,912	11,717	33,749	34,981
TOTAL PATIENT COST	2,809	1,598	131,726	1,056	4,273	24,586	12,345
TOTAL GOVT AND PATIENT COST	14,225	6,000	381,548	4,968	15,990	58,335	47,326
III TOTAL INPATIENT SERVICES							
USER BENEFICIARIES	44	22	206	17	35	112	30
DEPNT OF ACT DUTY SPONSOR	21	19	29	4	14	49	13
RETIREE	6	0	113	4	6	21	8
DEPNT OF RET OR DEC SPONSOR	17	3	66	9	15	43	9
TOTAL GOVERNMENT COST	55,192	38,518	1,197,454	6,987	34,519	152,202	290,161
TOTAL PATIENT COST	11,607	4,240	301,239	11,104	12,222	58,221	22,288
TOTAL GOVT AND PATIENT COST	66,799	42,758	1,498,693	18,091	46,741	210,423	312,449
AVG GOVT COST PER ADMISSION	2,299.67	3,209.83	11,974.54	3,492.50	2,157.44	3,902.62	9,672.03
AVG GOVT COST PER DAY	649.32	1,013.63	1,596.61	582.25	539.36	1,028.39	1,189.18
IV OUTPATIENT PROFESSIONAL SERVICES							
USER BENEFICIARIES	727	511	1,427	2,461	579	1,475	251
DEPNT OF ACT DUTY SPONSOR	475	296	269	1,442	158	817	142
RETIREE	47	44	552	328	180	210	28
DEPNT OF RET OR DEC SPONSOR	202	177	410	923	241	429	82
NUMBER OF VISITS	635	1,618	2,751	3,440	1,471	1,569	618
NUMBER OF NON-VISIT SERVICES	804	743	2,685	2,056	1,440	2,217	1,783
TOTAL GOVERNMENT COST	60,449	64,492	246,664	187,757	174,794	203,366	135,309
TOTAL PATIENT COST	33,992	42,424	182,417	89,256	79,955	135,854	46,231
TOTAL GOVT AND PATIENT COST	94,441	106,916	429,101	277,013	254,749	339,220	181,540
AVG GOVT COST PER VISIT	95.98	39.91	89.67	54.58	118.83	129.62	218.95
V OUTPATIENT CARE COST SHARED AS INPATIENT							
USER BENEFICIARIES	1	0	0	2	0	4	2
DEPNT OF ACT DUTY SPONSOR	1	0	0	2	0	4	2
RETIREE	0	0	0	0	0	0	0
DEPNT OF RET OR DEC SPONSOR	0	0	0	0	0	0	0
TOTAL GOVERNMENT COST	25	0	0	619	0	7,486	4,695
TOTAL PATIENT COST	108	0	0	50	0	150	75
TOTAL GOVT AND PATIENT COST	133	0	0	669	0	7,636	4,770
VI TOTAL INPATIENT AND OUTPATIENT CARE							
USER BENEFICIARIES	755	519	1,527	2,471	590	1,529	262
DEPNT OF ACT DUTY SPONSOR	488	303	287	1,446	164	840	147
RETIREE	52	44	605	329	181	216	31
DEPNT OF RET OR DEC SPONSOR	215	174	940	998	244	444	85
TOTAL GOVERNMENT COST	116,166	103,010	1,444,139	195,363	209,313	363,054	430,165
TOTAL PATIENT COST	45,707	46,664	483,656	100,410	92,177	194,225	68,594
TOTAL GOVT AND PATIENT COST	161,873	149,674	1,927,795	295,773	301,489	557,279	498,759

NOTE: REFER TO PAGE 1 (SPECIFICATIONS PAGE) OF THIS REPORT FOR CLARIFICATION OF THE DATA WHICH APPEARS ON THIS REPORT.

CATEGORY OF CARE - INTERNAL MEDICINE

	INFECTIOUS DISEASE	NEPHROLOGY	NEUROLOGY	NUTRITIONAL	PULMONARY RESPIRATORY	RHEUMATOLOGY	OTHER
I INPATIENT HOSPITAL SERVICES							
USER BENEFICIARIES	14	8	32	0	59	8	49
DEPNT OF ACT DUTY SPONSOR	10	4	15	0	27	0	35
RETIREE	1	2	5	0	14	4	4
DEPNT OF RET OR DEC SPONSOR	3	2	12	0	18	4	10
TOTAL HOSPITAL ADMISSIONS	15	8	32	0	64	8	48
HOSPITAL DAYS	82	32	149	0	335	70	119
AVERAGE LENGTH OF STAY (DAYS)	5.47	4.00	4.56	0.00	5.23	8.75	2.48
AVERAGE DAILY PATIENT LOAD	0.25	0.09	0.40	0.00	0.92	0.19	0.33
TOTAL GOVERNMENT COST	120,376	22,662	150,435	0	229,516	33,924	59,088
TOTAL PATIENT COST	8,802	3,310	19,883	0	56,793	12,964	11,092
TOTAL GOVT AND PATIENT COST	129,178	25,972	170,318	0	286,309	46,888	70,180
AVG GOVT COST PER ADMISSION	7,060.94	2,832.75	4,701.09	0.00	3,586.19	4,240.50	1,231.00
AVG GOVT COST PER DAY	1,294.37	708.19	1,030.38	0.00	685.12	484.63	496.54
II INPATIENT PROFESSIONAL SERVICES							
USER BENEFICIARIES	16	16	77	6	212	29	126
DEPNT OF ACT DUTY SPONSOR	9	5	37	3	76	0	59
RETIREE	4	5	13	2	58	14	27
DEPNT OF RET OR DEC SPONSOR	3	6	28	1	78	15	41
NUMBER OF VISITS	105	46	651	4	576	70	238
NUMBER OF NON-VISIT SERVICES	6	24	167	22	262	50	166
TOTAL GOVERNMENT COST	6,467	5,023	42,501	2,100	56,244	37,154	24,104
TOTAL PATIENT COST	1,874	2,361	11,836	507	31,245	40,644	26,067
TOTAL GOVT AND PATIENT COST	8,341	7,384	54,337	2,607	87,489	77,798	50,171
III TOTAL INPATIENT SERVICES							
USER BENEFICIARIES	22	21	82	6	235	29	161
DEPNT OF ACT DUTY SPONSOR	14	6	38	3	87	0	86
RETIREE	4	7	14	3	61	14	30
DEPNT OF RET OR DEC SPONSOR	4	8	31	1	67	15	47
TOTAL GOVERNMENT COST	126,844	27,685	192,935	2,100	285,760	71,078	83,192
TOTAL PATIENT COST	10,676	5,661	31,719	507	88,038	53,608	37,160
TOTAL GOVT AND PATIENT COST	137,520	33,356	224,654	2,607	373,798	124,686	120,352
AVG GOVT COST PER ADMISSION	7,461.41	3,461.88	6,029.22	0.00	4,465.00	8,884.75	1,733.17
AVG GOVT COST PER DAY	1,363.91	865.47	1,321.47	0.00	853.01	1,015.40	699.09
IV OUTPATIENT PROFESSIONAL SERVICES							
USER BENEFICIARIES	758	48	686	12	3,002	625	1,859
DEPNT OF ACT DUTY SPONSOR	524	22	319	8	1,854	162	1,236
RETIREE	55	9	124	0	354	163	151
DEPNT OF RET OR DEC SPONSOR	179	17	245	4	799	281	472
NUMBER OF VISITS	816	76	1,840	21	4,038	1,286	2,201
NUMBER OF NON-VISIT SERVICES	820	229	2,155	9	6,487	894	2,594
TOTAL GOVERNMENT COST	59,856	12,374	235,306	1,149	318,526	65,244	202,765
TOTAL PATIENT COST	23,707	6,957	123,712	649	180,902	52,172	135,605
TOTAL GOVT AND PATIENT COST	83,563	19,331	359,018	1,798	499,428	117,416	338,370
AVG GOVT COST PER VISIT	73.44	162.82	127.88	54.71	78.88	50.73	92.12
V OUTPATIENT CARE COST SHARED AS INPATIENT							
USER BENEFICIARIES	0	0	5	0	0	0	0
DEPNT OF ACT DUTY SPONSOR	0	0	5	0	0	0	0
RETIREE	0	0	0	0	0	0	0
DEPNT OF RET OR DEC SPONSOR	0	0	0	0	0	0	0
TOTAL GOVERNMENT COST	0	0	3,996	0	0	0	0
TOTAL PATIENT COST	0	0	3,081	0	0	0	0
TOTAL GOVT AND PATIENT COST	0	0	7,077	0	0	0	0
VI TOTAL INPATIENT AND OUTPATIENT CARE							
USER BENEFICIARIES	774	64	727	17	3,130	636	1,969
DEPNT OF ACT DUTY SPONSOR	555	27	357	10	1,901	162	1,297
RETIREE	58	14	129	2	388	187	173
DEPNT OF RET OR DEC SPONSOR	181	24	263	5	850	286	501
TOTAL GOVERNMENT COST	186,700	40,069	432,237	3,249	604,286	136,322	285,957
TOTAL PATIENT COST	34,384	12,618	158,513	1,156	268,940	105,780	172,764
TOTAL GOVT AND PATIENT COST	221,084	52,687	590,750	4,405	873,226	242,102	458,721

NOTE: REFER TO PAGE 1 (SPECIFICATIONS PAGE) OF THIS REPORT FOR CLARIFICATION OF THE DATA WHICH APPEARS ON THIS REPORT.

CATEGORY OF CARE

	DENTAL	OBSTETRICS	GYNECOLOGY	OPHTHALMOLOGY	PSYCHIATRY GROUP 1	PSYCHIATRY GROUP 2	SPECIAL PEDIATRICS
I INPATIENT HOSPITAL SERVICES							
USER BENEFICIARIES	2	48	15	5	165	89	10
DEPNT OF ACT DUTY SPONSOR	1	38	8	2	102	52	10
RETIREE	0	0	0	2	11	11	0
DEPNT OF RET OR DEC SPONSOR	1	10	7	1	55	26	0
TOTAL HOSPITAL ADMISSIONS	2	53	14	5	139	101	11
HOSPITAL DAYS	2	167	46	11	5,763	3,542	154
AVERAGE LENGTH OF STAY (DAYS)	1.00	3.15	3.29	2.20	29.06	35.07	14.00
AVERAGE DAILY PATIENT LOAD	0.01	0.49	0.12	0.03	15.84	9.70	0.42
TOTAL GOVERNMENT COST	4,824	74,261	26,261	6,709	1,915,362	1,241,366	247,661
TOTAL PATIENT COST	287	8,526	18,415	6,950	243,217	152,970	1,222
TOTAL GOVT AND PATIENT COST	5,111	82,787	43,176	13,659	2,156,586	1,395,336	248,883
AVG GOVT COST PER ADMISSION	2,412.00	1,414.36	1,925.79	1,341.80	9,614.92	12,290.75	22,514.64
AVG GOVT COST PER DAY	2,412.00	448.87	586.11	609.91	330.86	350.47	1,608.19
II INPATIENT PROFESSIONAL SERVICES							
USER BENEFICIARIES	4	152	42	16	180	97	30
DEPNT OF ACT DUTY SPONSOR	1	130	20	6	102	58	27
RETIREE	1	0	0	5	18	10	0
DEPNT OF RET OR DEC SPONSOR	2	23	22	5	62	29	4
NUMBER OF VISITS	2	165	14	37	2,585	962	396
NUMBER OF NON-VISIT SERVICES	1	768	127	19	32	33	160
TOTAL GOVERNMENT COST	3,761	97,667	23,027	10,986	160,891	63,842	35,227
TOTAL PATIENT COST	5,693	35,142	26,374	12,864	48,180	13,436	668
TOTAL GOVT AND PATIENT COST	9,454	132,809	49,401	23,850	209,071	77,278	36,115
III TOTAL INPATIENT SERVICES							
USER BENEFICIARIES	5	161	48	17	234	136	32
DEPNT OF ACT DUTY SPONSOR	2	136	22	6	139	77	29
RETIREE	1	0	0	5	20	16	0
DEPNT OF RET OR DEC SPONSOR	2	26	26	7	80	43	4
TOTAL GOVERNMENT COST	8,585	172,622	49,288	17,695	2,074,260	1,305,208	282,888
TOTAL PATIENT COST	5,980	43,668	45,789	19,815	291,397	167,406	2,110
TOTAL GOVT AND PATIENT COST	14,565	216,297	95,077	37,510	2,365,657	1,472,614	284,998
AVG GOVT COST PER ADMISSION	4,292.50	3,257.15	3,520.57	3,539.00	10,423.42	12,922.85	25,717.09
AVG GOVT COST PER DAY	4,292.50	1,033.71	1,086.70	1,608.64	358.68	368.49	1,836.94
IV OUTPATIENT PROFESSIONAL SERVICES							
USER BENEFICIARIES	82	10	624	1,461	729	876	335
DEPNT OF ACT DUTY SPONSOR	53	9	326	824	365	566	135
RETIREE	7	0	6	251	88	60	78
DEPNT OF RET OR DEC SPONSOR	22	1	293	386	288	256	122
NUMBER OF VISITS	69	(0)	765	2,864	6,442	8,004	546
NUMBER OF NON-VISIT SERVICES	74	80	2,529	1,181	411	333	1,020
TOTAL GOVERNMENT COST	7,966	2,908	197,129	351,042	319,177	414,908	42,249
TOTAL PATIENT COST	4,489	1,867	106,037	185,676	165,210	191,295	25,118
TOTAL GOVT AND PATIENT COST	12,455	4,775	303,166	536,718	484,687	606,203	67,367
AVG GOVT COST PER VISIT	115.45	0.00	251.12	122.57	49.55	51.84	77.38
V OUTPATIENT CARE COST SHARED AS INPATIENT							
USER BENEFICIARIES	0	22	11	8	0	0	0
DEPNT OF ACT DUTY SPONSOR	0	18	11	8	0	0	0
RETIREE	0	0	0	0	0	0	0
DEPNT OF RET OR DEC SPONSOR	0	5	0	0	0	0	0
TOTAL GOVERNMENT COST	0	11,410	18,847	6,666	0	0	0
TOTAL PATIENT COST	0	660	275	200	0	0	0
TOTAL GOVT AND PATIENT COST	0	12,070	19,122	6,866	0	0	0
VI TOTAL INPATIENT AND OUTPATIENT CARE							
USER BENEFICIARIES	84	175	649	1,466	842	939	356
DEPNT OF ACT DUTY SPONSOR	54	147	337	829	443	599	154
RETIREE	8	0	6	251	96	69	78
DEPNT OF RET OR DEC SPONSOR	22	29	307	386	319	279	125
TOTAL GOVERNMENT COST	16,551	186,946	265,964	375,407	2,393,437	1,720,116	325,137
TOTAL PATIENT COST	10,469	46,196	148,901	205,691	456,907	358,702	27,226
TOTAL GOVT AND PATIENT COST	27,020	233,142	414,865	581,098	2,850,344	2,078,818	352,363

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MRG05-007 (OHRJ6Q)
RUN DATE: 22 JAN 1992
RUN TIME: 02:15:17
MODE: 7B,BENE ZIP

CHAMPUS HEALTH CARE SUMMARY BY PRIMARY DIAGNOSIS
BASED ON CARE RECEIVED FROM OCT 1990 THRU SEP 1991
0E5 - SCOTT AFB, IL

PAGE: 05
COLLECTION PERIOD: 15 MONTHS
UNDUPLICATED

CATEGORY OF CARE - SURGERY

	EAR, NOSE AND THROAT	GENERAL SURGERY	NEURO-SURGERY	ORTHOPEDICS	THORACIC SURGERY	UROLOGY	GRAND TOTAL FOR ALL CATEGORIES
I INPATIENT HOSPITAL SERVICES							
USER BENEFICIARIES	16	78	25	46	4	21	806
DEPNT OF ACT DUTY SPONSOR	11	30	12	22	1	6	413
RETIREE	1	18	5	7	1	9	149
DEPNT OF RET OR DEC SPONSOR	4	30	8	17	2	6	248
TOTAL HOSPITAL ADMISSIONS	17	97	28	47	4	23	1,001
HOSPITAL DAYS	43	752	216	334	38	141	13,365
AVERAGE LENGTH OF STAY (DAYS)	2.53	7.75	7.71	7.11	9.50	6.13	13.35
AVERAGE DAILY PATIENT LOAD	0.12	2.06	0.59	0.92	0.10	0.39	36.62
TOTAL GOVERNMENT COST	64,987	498,122	134,280	466,500	39,942	106,082	6,866,796
TOTAL PATIENT COST	5,805	206,907	31,239	72,457	4,715	32,624	1,139,506
TOTAL GOVT AND PATIENT COST	70,792	705,029	165,519	538,957	44,657	138,706	8,006,302
AVG GOVT COST PER ADMISSION	3,822.76	5,135.28	4,795.71	9,925.53	9,985.50	4,612.26	6,859.94
AVG GOVT COST PER DAY	1,511.33	662.40	621.67	1,396.71	1,051.11	752.35	513.79
II INPATIENT PROFESSIONAL SERVICES							
USER BENEFICIARIES	47	184	44	119	8	64	1,232
DEPNT OF ACT DUTY SPONSOR	21	74	18	48	3	22	573
RETIREE	9	49	13	25	2	23	259
DEPNT OF RET OR DEC SPONSOR	17	61	13	46	3	19	407
NUMBER OF VISITS	95	652	239	496	39	145	10,187
NUMBER OF NON-VISIT SERVICES	71	597	168	460	71	185	5,065
TOTAL GOVERNMENT COST	29,001	154,114	56,346	135,135	5,784	49,165	1,348,550
TOTAL PATIENT COST	10,036	70,361	28,756	37,614	2,996	28,438	613,695
TOTAL GOVT AND PATIENT COST	39,037	224,475	85,102	172,749	8,780	77,603	1,962,245
III TOTAL INPATIENT SERVICES							
USER BENEFICIARIES	53	198	48	127	8	67	1,390
DEPNT OF ACT DUTY SPONSOR	27	79	19	49	3	22	656
RETIREE	9	50	13	27	2	24	284
DEPNT OF RET OR DEC SPONSOR	17	69	16	51	3	21	461
TOTAL GOVERNMENT COST	93,988	652,236	190,626	601,635	45,726	155,246	8,215,347
TOTAL PATIENT COST	15,841	277,268	59,994	110,071	7,712	61,062	1,753,201
TOTAL GOVT AND PATIENT COST	109,829	929,504	250,620	711,706	53,438	216,308	9,968,548
AVG GOVT COST PER ADMISSION	5,528.71	6,724.08	6,808.07	12,800.74	11,431.50	6,749.83	8,207.14
AVG GOVT COST PER DAY	2,185.77	867.34	882.53	1,801.30	1,203.32	1,101.04	614.69
IV OUTPATIENT PROFESSIONAL SERVICES							
USER BENEFICIARIES	5,230	1,697	159	3,046	33	1,116	17,955
DEPNT OF ACT DUTY SPONSOR	3,769	849	62	1,493	5	579	10,532
RETIREE	322	256	36	482	14	193	2,413
DEPNT OF RET OR DEC SPONSOR	1,151	595	61	1,081	14	349	5,113
NUMBER OF VISITS	7,622	2,392	618	6,963	86	1,365	60,133
NUMBER OF NON-VISIT SERVICES	2,823	6,627	446	6,369	268	3,154	51,239
TOTAL GOVERNMENT COST	442,122	529,936	62,319	675,221	33,454	267,121	5,314,126
TOTAL PATIENT COST	149,762	319,864	38,556	398,104	17,120	148,879	2,886,109
TOTAL GOVT AND PATIENT COST	591,884	849,800	100,875	1,073,325	50,574	416,000	8,200,235
AVG GOVT COST PER VISIT	58.01	221.55	100.84	96.97	389.00	195.69	88.37
V OUTPATIENT CARE COST SHARED AS INPATIENT							
USER BENEFICIARIES	24	7	0	17	0	4	107
DEPNT OF ACT DUTY SPONSOR	24	7	0	17	0	4	103
RETIREE	0	0	0	0	0	0	0
DEPNT OF RET OR DEC SPONSOR	0	0	0	0	0	0	5
TOTAL GOVERNMENT COST	26,367	7,175	0	28,214	0	4,369	119,868
TOTAL PATIENT COST	600	200	0	896	0	100	6,395
TOTAL GOVT AND PATIENT COST	26,967	7,375	0	29,110	0	4,469	126,263
VI TOTAL INPATIENT AND OUTPATIENT CARE							
USER BENEFICIARIES	5,249	1,792	180	3,086	36	1,145	18,308
DEPNT OF ACT DUTY SPONSOR	3,778	882	68	1,502	7	592	10,739
RETIREE	326	285	43	493	15	201	2,472
DEPNT OF RET OR DEC SPONSOR	1,157	630	69	1,101	14	357	5,210
TOTAL GOVERNMENT COST	562,477	1,189,347	252,944	1,305,069	79,181	426,736	13,649,342
TOTAL PATIENT COST	166,203	597,331	98,550	509,071	24,831	210,041	4,645,705
TOTAL GOVT AND PATIENT COST	728,680	1,786,678	351,494	1,814,140	104,012	636,777	18,295,047

NOTE: REFER TO PAGE 1 (SPECIFICATIONS PAGE) OF THIS REPORT FOR CLARIFICATION OF THE DATA WHICH APPEARS ON THIS REPORT.

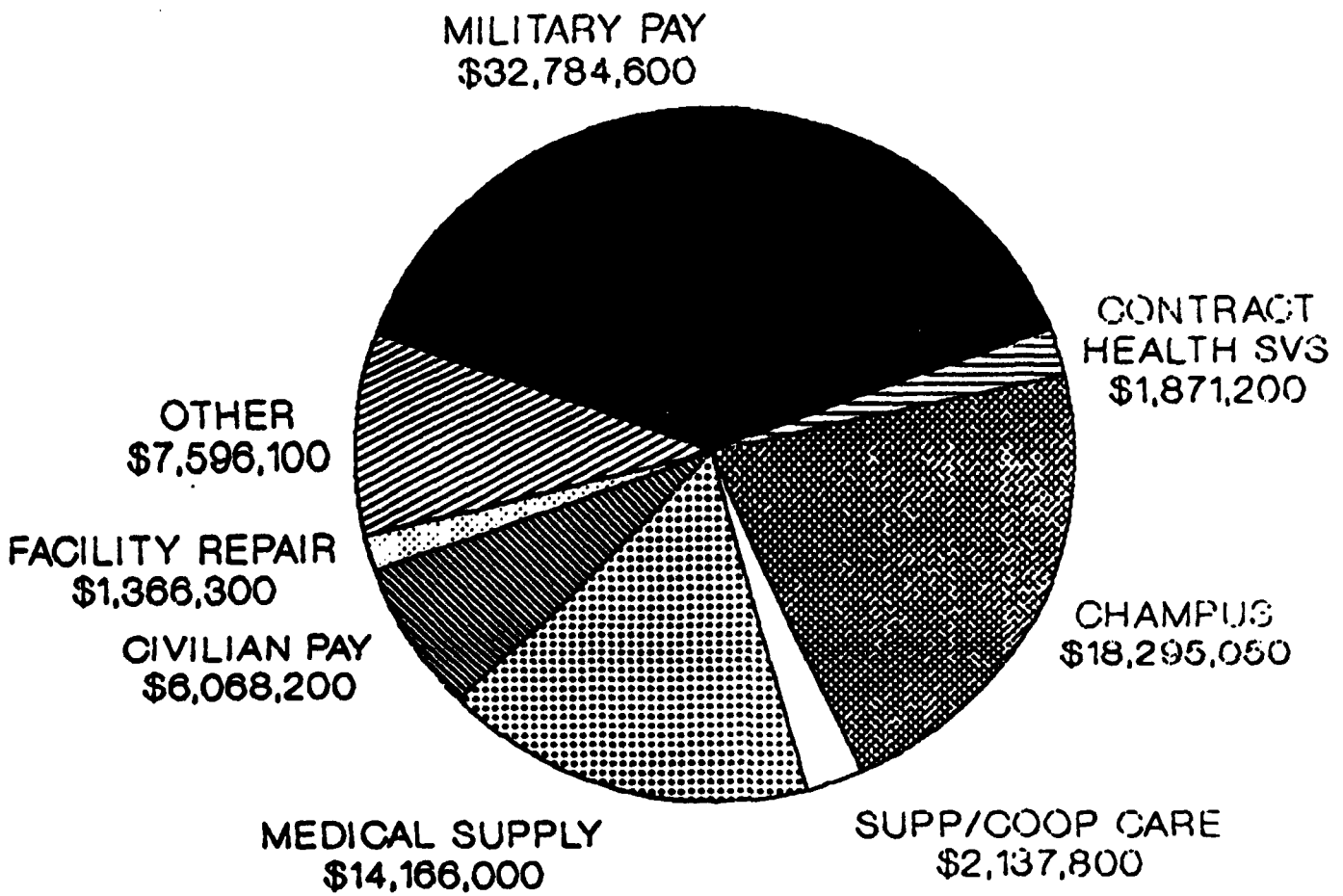
APPENDIX C

ST. LOUIS ARMY HEALTH CLINIC
FY91 OBLIGATIONS (IN $/000)

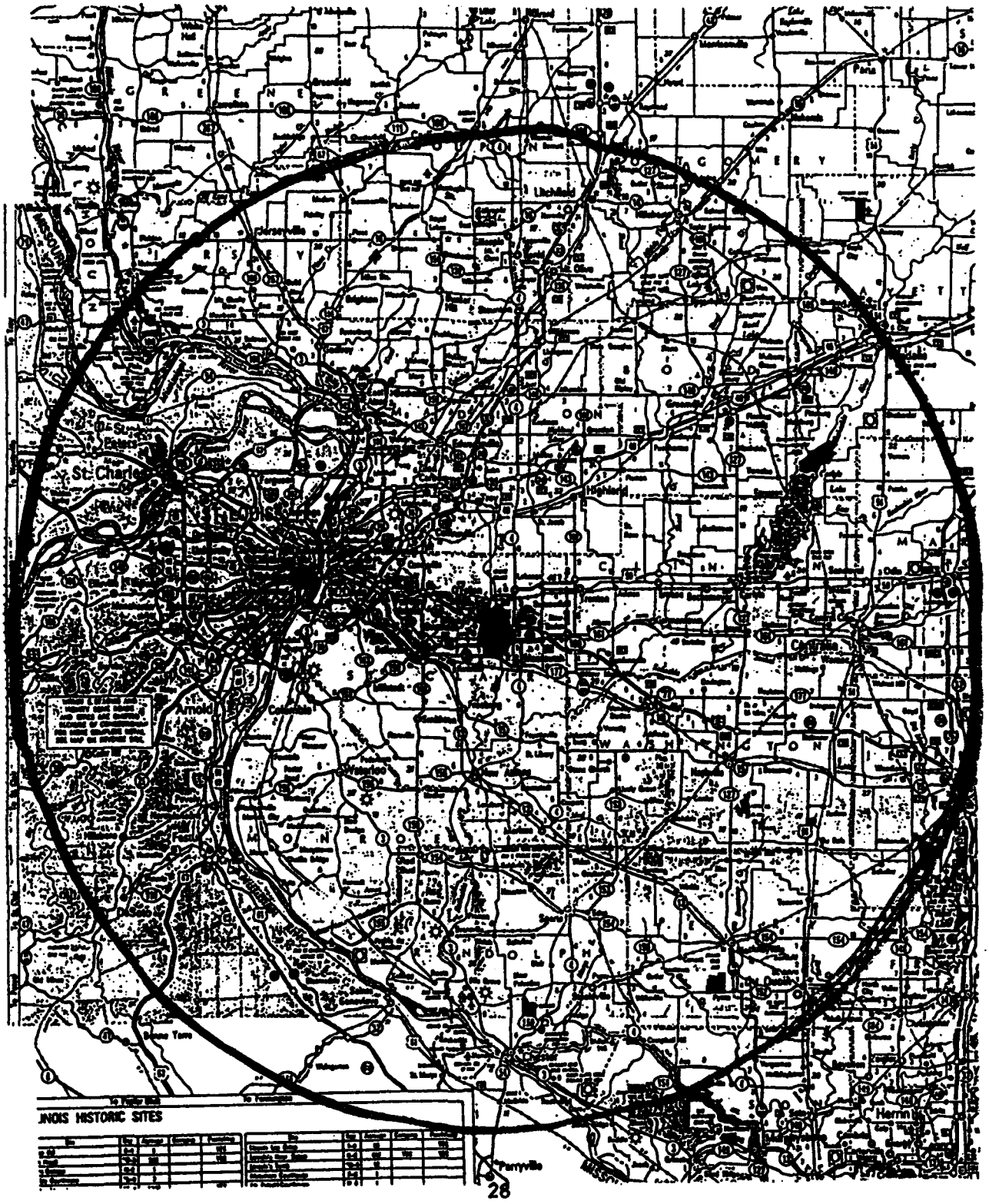
SERVICE	CIV PAY	TRAVEL	RENTS	CONTRCTS	SUPPLY	EQUIP	TOTAL
CHAMPUS	23.4						23.4
Dental	101.4				18.7	1.3	121.4
Administration	14.9	0.1		0.3	7.3	0.7	23.3
Med Records	55.7					5	60.7
AMB Med Branch	186						186
AMB Med Nurse	35	0.6		0.1	20.3		60
Optometry		0.4			0.1		0.5
Pediatrics	101						101
Occ Health	139.1		0.4		7.3	1.3	148.1
Pharmacy	58	1.5		2.9	486.5		548.9
Pathology	14.6	0.5					15.1
Pathology	49.9			9.3	59.4	5.3	123.9
Radiology	26.8				4.9		31.7
Radiology				20.4			20.4
Material SVC	21.7			0.6			22.3
Supp Care							
Counter Narcs	40.5						40.5
Flight Med							
TOTAL	868	3.1	0.4	33.6	604.5	13.6	1523.2

SERVICE	CIV END STRENGTH	CIV WORKYEARS	MILITARY PAY	MILITARY WORKYEARS
CHAMPUS	1	1		
Dental	5	4.8	338.8	6.1
Administration	1	1	261.6	2.7
Med Records	3	3.1		0.3
AMB Med Branch	2	2	161.3	1.8
AMB Med Nurse	1	1	193.4	6
Optometry				0.3
Pediatrics	1	1		
Occ Health	4	4		
Pharmacy	2	2	31	1.3
Pathology	1	1		
Pathology	2	2		
Radiology	1	1		
Radiology				
Material SVC	1	1	30.8	0.3
Supp Care				
Counter Narcs	1	1		
Flight Med			103.6	0.9
TOTAL	26	25.9	1120.5	19.7

1991 EXPENSES
SCOTT MED CENTER CATCHMENT AREA



APPENDIX E



ST. LOUIS CLINIC ___ SCOTT AFB ___

APPENDIX F

IMPLEMENTATION PLAN

Should the recommendation to realign the Health Clinic come to fruition, some of the key entities involved have expressed a desire to see the transfer become effective at the beginning of Fiscal Year 1994. Realizing the many levels of management that the approval process must endure, this goal may be a bit optimistic. However, for the benefit of all agencies involved, the transfer would be most effective prior to Scott Medical Center's full-scale implementation of the coordinated care program.

In the effort to get this realignment approved, the following steps are believed to be necessary:

* Obtain concurrence from the Commanders of the Fort Leonard Wood MEDDAC and Scott Medical Center

* Submit request for approval to Health Services Command

* With HSC approval, develop marketing plan in concert with Scott Medical Center.

  The two target populations are:
  Beneficiaries
  Command elements of ARPERCEN and ATCOM

* HSC submits request for approval to OTSG

* OTSG and the Air Force Surgeon General coordinate to present proposal to DOD/HA

* Upon final approval by DOD/HA, implement the execution phase of the realignment

APPENDIX F

The execution plan will, of course, be somewhat complex but, with the support of the highest levels, should be capable of being acted upon expeditiously. The following actions will be among those necessary to complete this transition:

* Market the benefits of the realignment to two target populations

* Resource managers from both Services determine what assets and resources will be transferred.

  Civilian positions
  Military positions
  Funding
  Equipment
  Lease agreement for current location

* Develop a target date for the actual change to Air Force Control

* Bring Air Force positions on-line

* Transfer Clinic control with an overlap time to eliminate disruption of care

* Transfer patient records

* Initiate the transfer of Civilian positions
  Initiate the PCS of Army staff

* Transfer Clinic control to the Air Force